

Title (en)  
CONTAINER HANDLING VEHICLE WITH FIRST AND SECOND SECTIONS AND ASSEMBLY OF MOTORS IN SECOND SECTION FOR DRIVING AT LEAST ONE WHEEL OF EACH OF THE SETS OF WHEELS

Title (de)  
CONTAINERHANDHABUNGSFAHRZEUG MIT EINEM ERSTEN UND EINEM ZWEITEN ABSCHNITT UND EINER ANORDNUNG VON MOTOREN IN EINEM ZWEITEN ABSCHNITT ZUM ANTREIBEN MINDESTENS EINES RADES EINES JEDEN RADSATZES

Title (fr)  
VÉHICULE DE MANIPULATION DE CONTENEURS DOTÉ DE PREMIÈRE ET SECONDE SECTIONS ET ENSEMBLE DE MOTEURS DANS LA SECONDE SECTION POUR ENTRAÎNER AU MOINS UNE ROUE DE CHACUN DES ENSEMBLES DE ROUES.

Publication  
**EP 4011806 A1 20220615 (EN)**

Application  
**EP 22154825 A 20190214**

Priority

- NO 20180589 A 20180425
- NO 20180590 A 20180425
- NO 20180591 A 20180425
- EP 2018077687 W 20181011
- EP 2018077713 W 20181011
- EP 2018077732 W 20181011
- EP 19703761 A 20190214
- EP 2019053681 W 20190214

Abstract (en)  
A container handling vehicle for picking up storage containers from a three-dimensional grid of an underlying storage system, comprising a first set of wheels arranged at opposite portions of a vehicle body of the container handling vehicle, for moving the vehicle along a first direction on a rail system of the grid; and a second set of wheels arranged at opposite portions of the vehicle body, for moving the vehicle along a second direction on the rail system of the grid, the second direction being perpendicular to the first direction; wherein the vehicle body comprises walls on all sides forming a footprint defined by horizontal peripheries in the X and Y directions of the vehicle body, and the container handling vehicle further comprises: a first section and a second section arranged side-by-side such that a centre point of a footprint of the first section is arranged off centre relative a centre point of the footprint FV of the vehicle body, and wherein a size ratio of the footprint F1 of the first section relative a footprint F2 of the second section is at least 2:1, and wherein the first section is configured to accommodate a storage container, the second section comprises an assembly of motors for driving at least one wheel of each of the sets of wheels.

IPC 8 full level  
**B65G 1/04** (2006.01); **B65G 1/137** (2006.01)

CPC (source: CN EP US)  
**B65G 1/04** (2013.01 - CN); **B65G 1/0464** (2013.01 - EP US); **B65G 1/0478** (2013.01 - EP); **B65G 1/065** (2013.01 - US); **B65G 1/137** (2013.01 - US); **B65G 1/065** (2013.01 - EP); **B65G 2201/0235** (2013.01 - US); **B65G 2201/0258** (2013.01 - EP)

Citation (applicant)

- WO 2014090684 A1 20140619 - JAKOB HATTELAND LOGISTICS AS [NO]
- WO 2015193278 A1 20151223 - JAKOB HATTELAND LOGISTICS AS [NO]
- NO 317366 B1 20041018 - AUTOSTORE AS [NO]
- EP 2017050195 W 20170105
- WO 2017153583 A1 20170914 - OCADO INNOVATION LTD [GB]
- WO 2016120075 A1 20160804 - JAKOB HATTELAND LOGISTICS AS [NO]

Citation (search report)

- [AD] WO 2014090684 A1 20140619 - JAKOB HATTELAND LOGISTICS AS [NO]
- [A] WO 2013167907 A1 20131114 - OCADO LTD [GB]
- [AD] WO 2015193278 A1 20151223 - JAKOB HATTELAND LOGISTICS AS [NO]
- [A] WO 2015019055 A1 20150212 - OCADO INNOVATION LTD [GB]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 4011806 A1 20220615**; CA 3095584 A1 20191031; CA 3095688 A1 20191031; CN 112041243 A 20201204; CN 112041243 B 20220419; CN 112041245 A 20201204; CN 112041245 B 20220617; CN 114604550 A 20220610; CN 114789868 A 20220726; DK 3784603 T3 20220516; EP 3784602 A1 20210303; EP 3784602 B1 20240410; EP 3784602 C0 20240410; ES 2912544 T3 20220526; JP 2021522137 A 20210830; JP 2021522138 A 20210830; JP 2023089293 A 20230627; JP 2023120407 A 20230829; JP 7270642 B2 20230510; JP 7304893 B2 20230707; PL 3784603 T3 20220523; US 11377298 B2 20220705; US 11465842 B2 20221011; US 11891246 B2 20240206; US 11912498 B2 20240227; US 2021229910 A1 20210729; US 2021292087 A1 20210923; US 2022289477 A1 20220915; US 2022348406 A1 20221103; US 2024132283 A1 20240425; US 2024158167 A1 20240516; US 2024228162 A9 20240711; WO 2019206487 A1 20191031

DOCDB simple family (application)  
**EP 22154825 A 20190214**; CA 3095584 A 20190214; CA 3095688 A 20190214; CN 201980027759 A 20190214; CN 201980027994 A 20190214; CN 202210332645 A 20190214; CN 202210563685 A 20190214; DK 19703761 T 20190214; EP 19703759 A 20190214; EP 2019053672 W 20190214; ES 19703761 T 20190214; JP 2020559522 A 20190214; JP 2020559523 A 20190214; JP 2023071463 A 20230425; JP 2023104914 A 20230627; PL 19703761 T 20190214; US 201917048942 A 20190214; US 201917048963 A 20190214; US 202217805169 A 20220602; US 202217812637 A 20220714; US 202318399330 A 20231228; US 202418422983 A 20240125